7 ALTERNATIVES TO THE PROPOSED PROJECT

State CEQA Guidelines Section 15126.6(a) requires an evaluation of "a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects, and evaluate the comparative merits of the alternatives." The project objectives are stated in Section 3.5, Project Objectives, of this RDEIR. Alternatives are used to determine whether or not a variation of the proposed project would reduce, or eliminate, significant project impacts, within the basic framework of the objectives. State CEQA Guidelines Section 15126.6(f) specifies that the range of alternatives is governed by the "rule of reason," requiring evaluation of only those alternatives "necessary to permit a reasoned choice." Further, an EIR "need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (State CEQA Guidelines Section 15126.6(f)(3)).

State CEQA Guidelines Section 15126.6(e) requires that, among other alternatives, a "no-project" alternative be evaluated in comparison to the proposed project. State CEQA Guidelines Section 15126.6(e) requires that the no-project analysis "discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with the available infrastructure and community services." Accordingly, two no project alternatives are analyzed in this DEIR: No Project Alternative–Continuation of Existing Land Uses, based on continued abandonment of the site; and No Project Alternative–Current Zoning, under which the site would be developed with land uses consistent with existing zoning designations for the site.

Other alternatives considered and evaluated in detail include the Reduced Development Alternative and the All Single-Family Development Alternative. Four alternatives, including an offsite alternative were considered by the lead agency, but were rejected from detailed evaluation because of their inability to reduce the significant and unavoidable impacts of the project, or meet City and state project objectives, or they would result in new significant environmental impacts. Descriptions of project alternatives are provided below. The advantages and disadvantages of each, compared to the proposed project, are presented and an evaluation of each alternative's ability to meet most of the project's basic objectives is included. Any significant environmental impacts created exclusively by an alternative are also identified.

A more detailed description of the baseline conditions, evaluation methodology and results are included in Section 4 of the DEIR and RDEIR and in technical reports prepared as part of the evaluation.

7.1 SUMMARY OF ENVIRONMENTAL CONSTRAINTS

The purpose of this section is to summarize the site-specific environmental constraints, as identified and discussed in Chapter 4, Existing Conditions, Thresholds of Significance, Environmental Impacts, and Mitigation Measures, of the DEIR and RDEIR. These site-

specific environmental constraints, if not avoided through either project design or mitigation, could result in significant or potentially significant environmental impacts.

Potential site-specific environmental constraints include conversion of important farmlands, construction-related air and noise impacts, vehicular site access impacts and storm drainage impacts. These constraints and their effects on the range of alternatives considered in this RDEIR are discussed below.

The project would result in a significant and unavoidable important farmland impact because it would result in the conversion of important farmlands to urban uses (discussed in Section 4.1 of the DEIR), and it would result in a potential significant and unavoidable vehicular site access impact if recommended mitigation, under the jurisdiction of the City of San Jose, was not implemented. The potential for the alternatives to avoid or reduce the project's significant and unavoidable impacts was considered in the analysis of alternatives.

As discussed in Section 4.3, Air Quality of the DEIR, the project could generate construction-related emissions that exceed the Bay Area Air Quality Management District (BAAQMD) standards. The ability of the alternatives to avoid or reduce construction-related emissions was considered in the analysis of the alternatives.

As discussed in Section 4.4, Noise of the DEIR, the project could generate construction-related noise that exceeds the City's maximum allowable noise standard for exterior noise (75 decibel [dB]) and the project could locate public use areas in areas of the site where exterior noise levels exceed the City's established thresholds. The ability of the alternatives to avoid or reduce construction-related noise impacts was considered in the analysis of the alternatives.

The project could generate stormwater volumes that exceed the design capacity of the City's storm drainage system. The ability of the alternatives to avoid or reduce stormwater volumes was considered in the analysis of the alternatives.

7.2 NO PROJECT ALTERNATIVE–CONTINUATION OF EXISTING CONDITIONS

The No Project Alternative–Continuation of Existing Conditions assumes that existing conditions at the project site remain. This means that the project site would continue as an abandoned agricultural research station and would only be periodically maintained for fire safety. No new facilities would be constructed and contaminated soils would not be remediated. Although this alternative assumes the continued abandonment of the site, it does not preclude the site from being developed at some future date. Instead, this alternative assumes that the project site would not transfer ownership to the affordable housing and market-rate developers; it would remain under the ownership of the state and could be used for other state uses, including educational, office, research, and institutional. In the event other State uses are proposed, the State would be responsible for ensuring compliance with CEQA and for remediating site soils to levels appropriate for proposed land uses as determined by DTSC. However, it is too speculative at this time to determine and evaluate the types of facilities and operations that could be located on the project site.

7.2.1 ENVIRONMENTAL ANALYSIS

LAND USE

The No Project Alternative–Continuation of Existing Land Uses would result in reduced land use impacts compared to the proposed project because it would retain existing onsite land uses. The site would continue as an abandoned agricultural station. Further, this alternative would eliminate the project's significant and unavoidable important farmland impact as no development would occur.

VISUAL RESOURCES

No change in the appearance of the project site would occur with this alternative. The existing buildings, fields, and fencing would remain in their present locations. Although impacts to visual resources would be avoided, these effects are less than significant under the proposed project.

AIR QUALITY

This alternative would avoid construction-related air quality impacts associated with the proposed project because no construction would occur. However, long-term local and regional air quality would be substantially similar to that associated with the proposed project, as the proposed project would not substantially affect local and regional air quality. Although impacts to air quality would be avoided, these effects are less than significant with the proposed project.

NOISE

This alternative would result in reduced noise impacts compared to the project because it would avoid the construction-related noise impacts of the proposed project because no construction would occur. Further, operational exterior noise impacts would be reduced under this alternative because the residences and park would not be constructed.

BIOLOGICAL RESOURCES

This alternative would not result in any impacts to biological resources because the project site would remain in its existing condition. Although impacts to biological resources would be avoided, these effects are less than significant with the proposed project.

HAZARDS AND HAZARDOUS MATERIALS

No hazardous materials would be generated, transported, used, or disposed at the site. Because the property would not be sold to the market-rate and affordable housing developers, funding to cleanup onsite soils would not be available. Therefore, some contamination would remain in the onsite soils. Although the site would be fenced and locked, trespassers and maintenance workers could come in contact with hazardous materials, which could result in potentially significant exposure impacts. This would be a new potentially significant impact for this alternative that would not be experienced as a result of the proposed project.

EARTH RESOURCES

This alternative would not result in any earth resource impacts as land uses would not change from existing conditions and no construction is proposed.

HYDROLOGY AND WATER QUALITY

This alternative would not result in any of the project's potentially significant construction-related water quality impacts because no construction would occur. Further, this alternative would not result in any of the potentially significant storm drainage impacts, because land uses and stormwater volumes would not change from existing conditions. However, the project's hydrology and water quality impacts have been mitigated to a less-than-significant level.

PUBLIC SERVICES AND UTILITIES

This alternative would not result in any public service and utility impacts because no development is proposed. Although impacts to public services and utilities would be avoided, these effects are less than significant with the proposed project.

TRANSPORTATION AND CIRCULATION

This alternative would result in reduced traffic impacts compared to the proposed project because no proposed facilities that would generate new vehicle trips would be developed. This alternative would avoid the project's potentially significant and unavoidable vehicular site access and significant and unavoidable cumulative site access impacts because no new improvements at the Winchester Boulevard/Forest Avenue intersection or the Stevens Creek Boulevard/Monroe Street intersection (under the jurisdiction of the City of San Jose) would be required. This alternative would also avoid the project's significant and unavoidable cumulative intersection impacts to Stevens Creek Boulevard/San Tomas Expressway, Stevens Creek Boulevard/Monroe Street, Pruneridge Avenue/San Tomas Expressway, Hedding Street/Bascom Avenue, and Stevens Creek Boulevard/Winchester Boulevard.

CULTURAL RESOURCES

This alternative would not result in any of the project's less-than-significant cultural resource impacts as no proposed demolition or construction activities would occur and the entire site would remain in its current condition.

POPULATION AND HOUSING

This alternative would not result in any of the project's less-than-significant population and housing impacts because no homes would be constructed.

7.2.2 ABILITY TO MEET PROJECT OBJECTIVES

This alternative would not meet any of the City's or state's project objectives, especially those related to provision of single-family residential and affordable senior housing to meet the City's

housing shortfall, it would not maximize the financial benefits to the state, it would not remediate onsite soils, and it would not reuse the site for private uses.

7.3 NO PROJECT ALTERNATIVE – CURRENT ZONING

The No Project Alternative–Current Zoning assumes that the project would be developed with land uses that are consistent with existing zoning designations versus state uses. The project site is currently designated in the City General Plan as moderate density residential, which allows the development of up to 25 dwelling units per acre. However, the City's Zoning Ordinance designates the site as "A" agricultural zone district, which would allow the development of one residence to support agricultural operations, including livestock farming, row crops, ranches, dairies, nurseries, and greenhouses. The project site could be used for row crop, nursery, and green house uses as infrastructure exists on the site to support those uses. Further, because the site is completely surrounded by urban development, the establishment of a ranch or dairy would be unlikely because of conflicting adjacent land uses, and would require additional approvals from the City. Therefore, this alternative assumes that the site would be developed with active farming, nursery, and greenhouse uses. It is likely that new structures would be constructed under this alternative to support proposed uses, and that heavy equipment (e.g., tractors, plows, forklifts) would be used as part of site operations. In the event the State sought to develop the site with other uses, the State would first be required to comply with CEQA for any new proposal. Because the project site would not be sold to private developers, funding would not be available for the clean up of contaminated soils on the site.

7.3.1 ENVIRONMENTAL ANALYSIS

LAND USE

This alternative would result in less-than-significant impacts related to alteration of land uses and land use compatibility because this alternative would continue agricultural uses on the project site. However, activities at the site could be more or less intense compared to previous conditions depending on the specific types of agricultural operations that occur. This alternative would eliminate the project's significant and unavoidable prime farmland impact as the project site would continue to be used for agricultural operations. Although some new buildings would be constructed, these buildings would support agricultural operations and, therefore, would be consistent with land use and zoning designations for the site.

VISUAL RESOURCES

This alternative would result in reduced visual impacts as the site would generally be unchanged from existing conditions. No changes in the overall visual character of the project site and surrounding area would occur under this alternative.

AIR QUALITY

This alternative would result in reduced construction-related air quality impacts compared to the proposed project because less construction (e.g., construction of buildings to support agricultural operations on portions of the site) would occur. This alternative would not result in substantial long-term vehicle emissions because no new residences are proposed. However, this alternative would result in operational emissions associated with farming activities, including emissions from farming equipment (e.g., tractors, plows, trucks) and dust emissions from tilling fields. These emissions are not anticipated to be substantially different from past operations because past operations have resulted in the full use (i.e., farming) of the project site, which is anticipated to occur under this alternative. Therefore, this alternative would result in less-than-significant air quality impacts and these impacts would be less than the project.

NOISE

This alternative would reduce the construction-related noise impacts of the proposed project because fewer construction activities would occur (e.g., construction of buildings to support agricultural operations). Noise associated with farming equipment could reach high levels for brief periods of time. These noise levels could potentially exceed the City's maximum acceptable exterior noise standard of 75 average decibel levels (dBA) at nearby adjacent residences. Farm vehicle noise would be most likely to exceed City noise standards when operating close to the edge of the property near adjacent residences. This noise impact would be potentially significant; however, implementation of mitigation measures similar to those recommended for the proposed project would reduce the noise-related effects of these activities. Although impacts would be reduced with implementation of mitigation, it is unknown whether these measures would reduce noise levels associated with proposed activities to a less-than-significant level. Therefore, this alternative could result in a new potentially significant and unavoidable noise impact that would not be experienced as a result of the project.

BIOLOGICAL RESOURCES

This alternative would result in a similar level of biological resource impacts compared to the proposed project because the project site would be fully used for farming operations. It is likely that fewer trees would be removed from the project site under this alternative; however, impacts to onsite trees are less than significant under the proposed project.

HAZARDS AND HAZARDOUS MATERIALS

Construction-related hazardous material impacts would occur with construction of structures to support agricultural operations. Because the site would be developed with farming operations, it is likely that hazardous materials, such as pesticides and fuels, would be used on a regular basis. Because the site would not be sold to the market-rate and affordable housing developers, funding to clean up contaminated soils on the site would not be available and contaminated soils

would not be removed under this alternative. Although the site would be fenced and locked, workers could come in contact with hazardous materials, which could result in potentially significant exposure impacts. This contamination along with new pesticide and fuel use on the site could cause adverse health effects. This would be a new potentially significant impact. Further, this alternative would continue to support structures that may contain hazardous materials, including PCBs, asbestos, and lead-based paint. Although these structures would not be demolished, it is likely that they would be used to support onsite operations and could expose workers to hazardous materials. This would be a new potentially significant impact for this alternative that would not be experienced as a result of the proposed project.

EARTH RESOURCES

Any new structures constructed at the site would be designed in accordance with current Uniform Building Code (UBC) design standards. However, none of the onsite structures are designed to meet current seismic design standards and could experience substantial damage in the event of an earthquake and expose workers to unsafe conditions. This would be a new potentially significant impact for this alternative that would not be experienced as a result of the proposed project.

HYDROLOGY AND WATER QUALITY

This alternative would result in decreased hydrology and water quality impacts compared to the proposed project, because a majority of the site would be unpaved or uncovered. This alternative is not anticipated to substantially increase stormwater volumes from existing conditions and, therefore, would not generate stormwater volumes that would exceed the capacity of the City's storm drainage system. Although this alternative would eliminate the project's potentially significant stormwater impact, this impact can be mitigated to a less-than-significant level. Construction and farming operations at the site would result in ground disturbance similar to the proposed project. This ground disturbance could lead to onsite or offsite erosion; however, mitigation recommended for the project would reduce this impact to a less-than-significant level. This alternative could result in the daily use of pesticides and fuels, which could come in contact with onsite soils and percolate to groundwater beneath the site. This would be a new potentially significant water quality impact for this alternative that would not be experienced as a result of the proposed project.

PUBLIC SERVICES AND UTILITIES

This alternative would result in similar or slightly reduced public service and utility impacts compared to the project. Under this alternative, services including police and fire protection would not be substantially affected; electricity, natural gas, water and wastewater service would be required, but at reduced levels compared to the project. This would be a less-than-significant impact.

TRANSPORTATION

This alternative would result in a reduction in trip generation on the project site because no housing is proposed. It is likely that there would be an increase in the number of vehicles traveling to and from the site on a daily basis. These trips would be fewer than with the proposed project and, therefore, would have a less-than-significant impact. Further, this increase is not expected to result in a significant cumulative effect. Because a new roadway leg would not be created at the Winchester Boulevard/Forest Avenue intersection, this alternative would eliminate the project's potentially significant and unavoidable project and cumulative vehicular site access impact. This alternative would also substantially reduce and could avoid the project's cumulative intersection impacts to the Stevens Creek Boulevard/San Tomas Expressway, Stevens Creek Boulevard/Monroe Street, Pruneridge Avenue/San Tomas Expressway, Hedding Street/Bascom Avenue, and Stevens Creek Boulevard/Winchester Boulevard intersection.

CULTURAL RESOURCES

Farming activities at the site could potentially uncover previously undiscovered cultural resources. Mitigation recommended for the proposed project would reduce this impact to a less-than-significant level. Therefore, this alternative would result in similar cultural resources impacts.

POPULATION AND HOUSING

This alternative would not result in any of the project's less-than-significant population and housing impacts as no proposed homes would be constructed. However, this alternative would not provide additional housing within the City to decrease the City's housing shortfall.

7.3.2 ABILITY TO MEET PROJECT OBJECTIVES

Implementation of this alternative would not meet any project objectives related to provision of single-family residential and affordable senior housing to meet the City's housing shortfall, it would not maximize the financial benefits to the state, and it would not remediate onsite soils.

7.4 ALL SINGLE-FAMILY DEVELOPMENT ALTERNATIVE

The All Single-Family Development Alternative includes development of approximately 16 acres of the 17-acre site with single-family residential units and would not include senior housing. This alternative would result in the development of approximately 200 single-family units at a density of almost 12 units per acre. These units would be similar to the project's single-family units, varying in size from 1,500 square feet to 3,000 square feet on approximately 2,000 to 5,000 square-foot lots. The homes would be 1 or 2 story structures with attached garages and would include 3 to 4 bedrooms. The lots would include a backyard (varying in depth from 15 to 20 feet) and driveway access. Generally, the larger lots and homes would be located around the perimeter of the site.

Site access and layout would be similar to the project, with the proposed senior housing site replaced by the additional single-family residential units. Access would be from North Winchester Boulevard (two entrances) with emergency access from Forest Avenue. Interior circulation would be provided by private alleys and roadways. The site would include pedestrian corridors and an approximately 1-acre public park (in the northwestern corner of the site). The park would have pedestrian access from the interior of the project site and from Forest Avenue. Site landscaping and setbacks would be in accordance with applicable City guidelines. This alternative would remediate onsite contaminated soils to unrestricted residential use levels. Ten percent of the units would be affordable consistent with the City's Housing Element Inclusionary Policy.

This alternative is evaluated at the project-level of detail and could be approved and adopted by the City of Santa Clara based on the CEQA evaluation in this document. The following is a summary of the evaluation of potential impacts from the implementation of the All Single-Family Development Alternative. The conclusions presented in this section are supported by the detailed account of the evaluation methodology, baseline conditions, levels of significance and impact analysis provided in Chapter 4 of this DEIR and in the various technical reports prepared as part of this evaluation.

7.4.1 ENVIRONMENTAL ANALYSIS

LAND USE

The All Single-Family Development Alternative would require a change in onsite land uses from fallow agricultural land to single-family residential uses. The surrounding land uses are residential or commercial and no other agricultural land is located in proximity to the site. Therefore, the conversion of this property to residential uses would be compatible with surrounding land uses. This alternative would result in infill residential development in a predominantly residential area of the City and would seek a zoning amendment to make onsite land uses compatible with zoning designation. Because this alternative would construct onsite land uses that are compatible with surrounding land uses, this alternative would result in less-than-significant land use compatibility impacts, which would be the same as the project.

The project site is considered to be a farmland resource by the CDC. Similar to the project, this farmland resource would be converted to a non-agricultural use under this alternative. The project site has not been used for agricultural operations since January 2003. The limited size of the site would also contribute to difficulties in operating a feasible commercial farm. The CDC has designated the parcel's soils as Prime Farmland and Farmland of Statewide Importance. This alternative would, therefore, result in the conversion of prime and important farmlands to non-agricultural uses. The conversion of Prime Farmland and Farmland of Statewide Importance to non-agricultural uses would be a significant impact and as described in Section 4.1, Land Use and Agricultural Resources, no feasible mitigation measures are available to reduce the significance of the impact. This would be a significant and unavoidable impact of this alternative.

The project site is currently designated moderate-density residential in the City's General Plan and "A" Agricultural Zone District by the City's Zoning Ordinance. The moderate-density land use designation would allow the development of up to 425 dwelling units on the project site. However, the "A" zoning designation allows only one single-family residence associated with agricultural operations on the site. This inconsistency relates to a land use regulation issue, where existing zone has not been updated to conform to current General Plan designations, rather that a physical environmental consequence of the project. Therefore, the zoning inconsistency does not constitute a significant environmental effect under CEQA.

Similar to the project, this alternative would include a zoning amendment to change the site's zoning designation to be consistent with planned land uses. Use of the Planned Development zone district with a residential density consistent with the General Plan would achieve zoning conformance and allow development of this alternative. The proposed zoning would allow the development of residential land uses as long as their density and unit size are similar to existing surrounding residential uses. The proposed alternative would include development of single-family residences (no more than two stories) that range in size from 1,500 to 3,000 square feet, which are similar to the existing residential development in the surrounding area. With the proposed zoning amendment this alternative's land uses, zoning, and General Plan designation would be consistent. Therefore, this would be a less-than-significant land use impact.

Overall, this alternative would result in land use impacts that are comparable to the project, and the project's and this alternative's land use impacts would be less than significant.

VISUAL RESOURCES

The All Single-Family Development Alternative would convert former agricultural lands to urban land uses. Because the existing land is not substantially visible by the public as a scenic resource, its conversion would not cause a significant aesthetic impact for public viewers. The project's proposed single-family land uses would be similar in type and intensity to surrounding residential development and would include similar features.

Public views of the development would be limited to viewpoints along Winchester Boulevard and the emergency access driveway along Forest Avenue. In general, views of the project would be similar to public views of the surrounding residential community and would include rows of homes on streets, and numerous roadways connecting these areas. Public views of the site would not experience a substantial adverse change.

A change to views from private residences is a potential source of environmental impact, which a lead agency may choose to consider in accordance with recent CEQA case law (see Section 4.1). Views from some private residences abutting the project site would change with implementation of the project. The private views of adjacent residences with direct views of the project site (i.e., adjacent two-story homes or residences with chain-link fencing) would be changed from open fields to a residential neighborhood. Although the appearance of the site from some private viewpoints would change and is an important issue to local residents, the change would not be a significant effect under CEQA, because the appearance of the project

site would represent a filling-in and continuation of the residential neighborhood character of the existing surrounding area. The precise design of proposed homes next to existing homes is an important planning issue that would be addressed during architectural review by the City. However, within the context of CEQA, this would be a less-than-significant visual environmental impact. This alternative would result in visual impacts that are comparable to the project, and visual impacts would be less-than significant.

AIR QUALITY

The All Single-Family Development Alternative is located in an area considered in nonattainment for the state and federal 1-hour O_3 standard, federal 8-hour O_3 standard, and state PM_{10} and $PM_{2.5}$ standards. The basin is designated attainment or unclassified for all other NAAQS and CAAQS (BAAQMD 2006).

The URBEMIS2002 model was used to estimate the increase in air emissions associated with changes in vehicle trips associated with the All Single-Family Development Alternative. The detailed URBEMIS2002 modeling results are included in the Air Quality Analysis Report included in Appendix B of the DEIR. The results are summarized in Table 7-1.

Table 7-1
Increase in Air Emissions Associated with the
All Single-Family Development Alternative Project-Related Vehicle Trips

Land Use	ROG		NO_x		PM_{10}	
	(lbs/day)	(tons/yr)	(lbs/day)	(tons/day)	(lbs/day)	(tons/day)
Single Family Housing	27.34	4.64	38.10	5.35	19.22	3.51
Total	**27.34**	**4.64**	**38.10**	**5.35**	**19.22**	**3.51**
BAAQMD Significance Threshold	80	15	80	15	80	15
Exceed Threshold	No	No	No	No	No	No
Source: EDAW 2004						

Carbon monoxide (CO) concentrations were estimated for three nearby intersections with the highest level of congestion as measured by level of service (LOS). LOS was estimated as part of the traffic analysis conducted for this alternative (refer to Appendix J). The three intersections included in the CO analysis were:

- San Tomas Expressway/Pruneridge Avenue,
- San Tomas Expressway/Stevens Creek Boulevard and
- Monroe Blvd/Stevens Creek Boulevard

For each of these intersections, three scenarios were analyzed:

- Existing Conditions,
- Future without the All Single-Family Development Alternative, and
- Future with the alternative.

CO concentrations were estimated using the CALINE4 model developed by the California Department of Transportation (Caltrans). The vehicle emission rates used in the CALINE4 model were developed using the California ARB's EMFAC2002 model. CO concentrations were estimated for sensitive receptors located closest to each intersection. The detailed CO modeling data are included in Appendix B of the DEIR. The results of the CO modeling analyses are shown in Table 7-2.

Table 7-2
Carbon Monoxide Modeling Results
Under the All Single-Family Development Alternative

	Existing		Future No Alternative		Future with Alternative	
Receptor	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour
1. Pruneridge Avenue/San Thomas Expressway	11.4	6.9	12.2	7.3	12.2	7.3
2. Stevens Creek/San Tomas Expressway	13.9	7.3	14.7	7.6	14.7	7.6
3. Stevens Creek/Monroe Street	12.4	6.9	13.4	7.3	13.5	7.4
California Standards	20	9.0	20	9.0	20	9.0

Notes: EMFAC2002 used to generate vehicle emission rates. CALINE4 modeling used to estimate ambient concentrations. 1-hour background concentration of 6.0 ppm and 8-hour concentration of 3.7 ppm based on data from the measuring/monitoring station in accordance with the CO protocol. A persistence factor of 0.7 was used to convert 1-hour to 8-hour concentrations.

Source: EDAW 2004

As noted in the previous tables operational impacts from this alternative would result in minor increases in ROG, NO_X, CO, and PM_{10} emissions and this alternative would not increase emissions of these constituents above BAAQMD or California significance thresholds. Further, based on modeling results (Appendix B), this alternative would not result in substantial increases from area source emissions (i.e., landscape maintenance equipment). Therefore, operational air emissions from the All Single-Family Development Alternative would be less than significant.

Construction-related emissions are generally short-term in duration, but can cause adverse air quality impacts. PM_{10} is the pollutant of greatest concern with respect to construction activities. PM_{10} emissions result from the generation of fugitive dust associated with a variety of construction activities, including excavation, grading, demolition, site preparation, and vehicle travel on paved and unpaved surfaces. Construction equipment also produces CO and ozone

precursor emissions. These emissions are included in the emissions inventory that is the basis for regional air quality plans, and are not expected to impede attainment of ozone or maintenance of CO standards in the Bay Area.

The BAAQMD does not require that construction emissions be quantified. Rather, the significance of construction emissions should be determined based on whether BAAQMD's feasible control measures would be implemented with construction activities associated with the alternative (BAAQMD 1999). Implementation of BAAQMD control measures can result in overall reductions in fugitive dust emissions by approximately 50–75%. It is assumed that for purposes of this analysis, that the developer of this alternative would include implementation of feasible BAAQMD PM_{10} construction mitigation measures, which can result in 50–75 % reductions in fugitive dust emissions. Therefore, because all feasible BAAQMD control measures would be implemented, this alternative's PM_{10} construction-related emissions would be less than significant.

As a result of pesticide use related to past agricultural practices on the site some soils have concentrations of arsenic and dieldrin above EPA preliminary remediation goals. To implement the alternative the DGS would be required to remediate onsite soils to bring them to levels suitable for proposed uses (i.e., unrestricted residential use) before construction. Pursuant to DGS' Voluntary Cleanup Agreement (VCA) with the DTSC, DGS has prepared a RAW that identifies necessary remediation activities. Elements of the RAW include excavation and removal of onsite contaminated soils and importation of clean fill material. During these activities, disturbance of onsite soils could result in dust generation and release contaminants to the atmosphere and imported fill could contain contaminants (i.e., naturally occurring asbestos). The approved RAW would include dust control measures in compliance with BAAQMD requirements, including but not limited to: wet suppression, air monitoring and collection of meteorological data, and installation of a wind fence (50% porosity) to reduce wind speed and minimize offsite travel of dust particles. Implementation of these dust control measures would reduce the potential for nearby residents to be exposed to contaminants present in onsite soils through the air pathway to less-than-significant levels. Further, the RAW would include measures (i.e., soil testing) to prevent the importation of fill material that contains contaminants. Therefore, this would be a less-than-significant impact.

Construction of this alternative could result in odors associated with construction equipment exhaust, asphalt paving and other activities. The nearest sensitive land uses include residential development that immediately borders the north, west, and southern site boundary. These impacts would be short-term in nature, terminating after construction is complete. As such, construction-related emissions of odorous compounds would not be anticipated to result in frequent or prolonged exposure of sensitive receptors to odors. This alternative does not include the long-term operation of any major stationary source of odorous emissions. Implementation of this alternative would not generate substantial odors during construction or operation and odor impacts would be less than significant.

This alternative would result in minor increases in vehicular trips associated with the development. This alternative (200 single-family homes) would generate 165 a.m. and

226 p.m. peak-hour vehicle trips per day. These vehicle trips were entered into the URBEMIS2002 model to estimate the increase in air emissions associated with implementation of this alternative. The results of the emissions modeling are presented in Tables 7-1 and 7-2. As described in those tables, this alternative would not increase emissions of ROG, NO_x, CO, or PM_{10} above BAAQMD or California significance thresholds. Further, based on modeling results presented in Appendix B, this alternative would not result in substantial increases from area source emissions (i.e., landscape maintenance equipment). Therefore, this alternative's project-related operational air emissions would be less than significant.

This alternative would result in comparable construction-related odor and remediation related air quality impacts to the project. This alternative's operational (i.e., vehicle trips) air quality impacts would be slightly greater than the project, but would not exceed any BAAQMD or California significance thresholds. Overall, this alternative would result in less-than-significant air quality impacts, but these impacts would be slightly greater than the project's air quality impacts.

NOISE

This alternative would not substantially increase trip generation compared to existing conditions. Modeling results for predicted traffic noise levels associated with implementation of the All Single-Family Development Alternative (Table 7-3) indicate that this alternative would result in a less than 0.3 dB increase in roadway traffic noise levels. This change would not represent a substantial change in the ambient noise environment (i.e., less than 3 dB) and would not noticeably change operational traffic noise levels from existing conditions. Therefore, this would be a less-than-significant impact.

The Noise Element of the City of Santa Clara General Plan establishes noise level standards for exterior residential use. Noise levels of 55–65 dBA L_{dn} are considered a cautionary level and levels over 65 dBA L_{dn} are considered a critical level. For residential uses affected by transportation noise sources, such as roadway noise, the San Jose General Plan establishes an "acceptable" exterior noise level standard for residential uses of 55–60 dB day/night average sound level (DNL or L_{dn}), which is applied in the outdoor activity areas. Exterior noise levels at residential units closest to Winchester Boulevard are expected to reach up to 67 dB L_{dn} with implementation of this alternative. This level exceeds the City of Santa Clara and City of San Jose criteria. This impact is comparable to that of the project and mitigation recommended for the project (Mitigation Measure 4.4-3) would reduce this impact to a less-than-significant level.

Implementation of this alternative would not result in the construction or operation of any major onsite sources of noise and would not result in excessive groundborne vibration or groundborne noise levels. Noise associated with residential development typically includes intermittent and short-term noise associated with amplified music, adult and children voices, and lawn maintenance equipment. Noise from these stationary and area noise sources are not expected to result in a substantial increase in ambient noise levels.

Table 7-3
FHWA Traffic Noise Prediction Model Results
for All Single-Family Development Alternative

Roadway	Segment	Predicted L_{dn}, 50 Feet from Roadway Centerline						
		Existing No Project	Existing + Project	Change	Background No Project	Background + Project	Change	Future 60 dB L_{dn} Contour
N.Winchester Boulevard	N. of W. Hedding Street	65.62	65.75	0.13	66.85	66.94	0.09	191.1
	W. Hedding Street to Forest Avenue	67.00	67.23	0.23	67.62	67.82	0.02	218.5
	Forest Avenue to Dorcich Street	68.23	68.50	0.27	68.99	69.22	0.23	270.3
	Dorcich Street to Stevens Creek Boulevard	67.89	68.15	0.26	69.66	69.83	0.17	296.8
	S. of Stevens Creek Boulevard	69.17	69.25	0.08	70.54	70.59	0.05	333.7
Prunridge Avenue	W. of N. Winchester Boulevard	66.35	66.45	0.1	67.47	67.55	0.08	209.5
W. Hedding Street	E. of N. Winchester Boulevard	66.24	66.30	0.06	67.13	67.18	0.05	167.8
Forest Avenue	W. of N. Winchester Boulevard	55.78	55.91	0.13	55.78	55.91	0.13	-
	E. of N. Winchester Boulevard	66.05	66.15	0.10	66.38	66.47	0.09	150.4
Dorcich Street	W. of N. Winchester Boulevard	58.37	58.51	0.14	59.91	60.01	0.10	56.1
Stevens Creek Boulevard	W. of N. Winchester Boulevard	69.85	69.87	0.02	70.03	70.05	0.02	307.1
	E. of N. Winchester Boulevard	70.48	70.55	0.07	70.76	70.83	0.07	345.8

Note: A complete listing of FHWA inputs is provided in Appendix C.
Source: Modeling by EDAW 2004.

This alternative would include a one-acre park in the northwest portion of the site. Noise levels for proposed park uses were estimated by measuring continuous four-day noise levels at a similar park facility. The results of the noise monitoring indicated that park uses generated noise levels that ranged from 50 to 52 dBA L_{dn}, which is below the City's satisfactory noise standard of 55 dBA L_{dn}. Therefore, proposed park uses are not anticipated to generate substantial stationary noise and would not expose adjacent residences to new onsite sources of noise associated with development of the project. Because noise levels associated with proposed residential and park land uses would not exceed existing City noise standards, this would be a less-than-significant impact.

The maximum allowable interior noise level in the City of San Jose and the City of Santa Clara is 45 dB L_{dn} for new residential projects (City of San Jose 2003 and City of Santa Clara 1992). Noise modeling predictions indicate that exterior noise levels at the residential areas along Winchester Boulevard may reach 67 dBA $L_{dn.}$. Typical building facades and design elements (i.e., heating and air conditioning (HVAC) systems, dual-pane windows) would reduce interior noise levels by approximately 25 dB L_{dn}. Similar to project, proposed residences would likely be constructed with windows that could open and close and central heating and air conditioning systems. Implementation of these design elements would reduce interior noise levels by approximately 25 dB L_{dn}. Predicted interior noise levels, with implementation of standard design measures, would be approximately 42 dB L_{dn}, which is below state and city 45 dB L_{dn} interior noise standards. This would be a less-than-significant impact.

Construction noise would be temporary and would include noise from activities such as soil excavation, site preparation, truck hauling of material, and construction of buildings. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction and the activities being performed. Noise generated during construction and demolition activities would be primarily associated with the use of mobile equipment including graders, dozers, and excavators. No groundborne noise generating equipment (e.g., pile drivers) would be used at the site. Because power is already supplied to the project site, use of portable power generators would not be anticipated. Construction of the proposed project would occur in phases over a 24- to 36-month construction period.

Because of the noise-generation potential of construction projects, such activities during the more noise-sensitive evening and nighttime hours are of increased concern. Exterior ambient noise levels typically decrease during the late evening and nighttime hours because of decreased community activities (e.g., industrial activities, vehicle traffic). Construction performed during these more noise-sensitive periods of the day can result in annoyance and potential sleep disruption to occupants of nearby residential dwellings. Project facilities would be constructed during daytime hours of operation (i.e., 7 a.m. to 7 p.m. weekdays and Saturdays 9 a.m. to 6 p.m.).

Noise from localized point sources (such as construction sites) typically decreases by about 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate, and assuming a maximum noise level of 88 dBA at the project site boundary, maximum short-term noise levels at the adjacent noise-sensitive land uses, would be approximately 88 dBA. Although construction activities would be temporary and would cease after the project is complete, these noise levels would exceed the City's maximum allowable noise standard of 75 dBA. As a result, noise-generating construction activities would have a potentially significant short-term noise impact. This impact is comparable to that of the project and implementation of the mitigation measures identified for Impact 4.4-4 would reduce the effect to a less-than-significant level.

Overall, this alternative would result in comparable construction-related and operational noise impacts to the project, and the project's and this alternative's noise impacts would be less than significant.

BIOLOGICAL RESOURCES

Implementation of this alternative would remove less than 17 acres of fallow agricultural fields, which provide habitat for common plant and wildlife species. Some plant and wildlife populations on the project site would be reduced or eliminated, but all species that would be disturbed by project development are regionally common. Implementation of this alternative would not substantially reduce available habitat for any common plant or wildlife species and would not cause any measurable effect on the local population of any native plant or animal. Implementation of this alternative would not substantially impede wildlife movement or the use of important nursery sites. These impacts would be less than significant.

None of the six special-status species identified in the California Natural Diversity Data Base (CNDDB) search have been recorded on the project site and none are expected to occur. The California tiger salamander is not expected because this species requires vernal pools and other seasonal wetlands for breeding; suitable breeding habitat was not found on or adjacent to the site. None of the four special-status plants recorded in the vicinity are expected because they are all found in native habitat that is not present on the project site. Burrowing owl is not expected because no burrows considered suitable for nesting were found during the field survey and the amount of undeveloped land is not expected to provide adequate foraging opportunities for the owl. Further, the City requires that a pre-construction survey for burrowing owl be conducted before the commencement of construction activities for all development projects to ensure compliance with the provisions of the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Impacts from the implementation of this alternative would not result in significant impacts to special-status species. Implementation of this alternative would be consistent with local, state or federal laws or regulations governing special status species.

Sensitive habitats can include Waters of the United States (U.S.), including wetlands and natural plant communities on the list of California Terrestrial Natural Communities Recognized by the CNDDB (CNDDB 2003). No sensitive habitats are present on or adjacent to the site and therefore no impacts are anticipated.

A more detailed description of the biological resource, evaluation methodology and special status species is included in Section 4.5 of this DEIR. Overall, this alternative would result in comparable biological impacts to the project, and the project's and this alternative's biological impacts would be less than significant.

HAZARDS AND HAZARDOUS MATERIALS

The All Single-Family Development Alternative site is not located within ¼ mile of an existing or proposed school, nor is the site in an airport land use plan or within 2 miles of a public or private airport. Therefore, no significant effects would occur related to these issues, and they are not evaluated in further detail in this DEIR.

A Phase I Environmental Site Assessment and a Phase II Assessment were conducted to evaluate the potential for on site contamination. The Phase I and II reports identified presence of elevated concentrations of arsenic in onsite soils as a result of past pesticide use. Asbestos, lead-based paint and PCBs are also likely to be present in onsite buildings and in electrical transformers and electrical power poles. DGS entered into a VCA with DTSC and prepared a draft RAW that identifies the necessary remediation activities to excavate and remove onsite contaminated soils. The approved RAW would require the preparation of a site Health and Safety Plan. This plan would outline measures that would be employed to protect construction workers and adjacent residents from exposure to hazardous materials during construction activities. Further, development contractors would be required to comply with state health and safety standards for all demolition work. This would include compliance with OSHA and Cal-OSHA requirements regarding exposure to asbestos and lead-based paint. Therefore, the alternative's potential to expose construction workers and adjacent residents to safety hazards would be less than significant.

The RAW outlines measures for specific handling and reporting procedures for hazardous materials, and disposal of hazardous materials removed from the site at an appropriate offsite disposal facility. Analysis and mitigation measures addressing the potential release of hazardous materials into the atmosphere are addressed in Section 4.3, Air Quality of this DEIR and a more detailed discussion of the contamination evaluation is included in Section 4.6 Hazards and Hazardous Materials and in Appendix D and E of the DEIR. Implementation of the All Single-Family Development Alternative would not result in a significant hazard to the public or the environment.

The project would include the construction of up to 200 single-family residences, a 1-acre municipal park, and infrastructure typically associated with residential development. These uses would not involve the use, storage or transport of hazardous materials on a routine basis. During construction, minor use, storage and handling of hazardous substances, including fuel and asphalt, would be expected. This would be done in accordance with applicable local, state and federal regulations, including Cal-OSHA requirements, and manufacturers' instructions. Because all project activities would be in compliance with applicable laws pertaining to the handling, transport, and storage of hazardous materials, this impact would be less than significant.

Overall, this alternative would result in comparable hazards and hazardous material impacts to the project because the entire site would be developed and all contaminated soils would be removed from site. The project's and this alternative's hazards and hazardous material impacts would be less than significant.

EARTH RESOURCES

The All Single-Family Development Alternative site is not in a State-designated fault zone and ground rupture would not be anticipated. The parcel's proximity to the active San Andreas, Hayward and Calaveras fault systems could result in seismic ground shaking intensities of magnitude X to XI, which could result in structural damage to buildings. The UBC classifies the project site as being in seismic zone IV; minimum ground acceleration of 0.40g are used

for structure designs in the region. Structures built in accordance with these standards should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some non-structural damage; 3) resist major earthquakes without collapse, but with some repairable structural damage as well as non-structural damage; and 4) resist major earthquakes, equal to the strongest experienced in California, without collapse but with major nonstructural and structural damage that may not be repairable (City of Santa Clara 1992). Because this alternative would comply with UBC design standards and City of Santa Clara Resolution No. 6976 seismic-related impacts would be less than significant.

The site is located in the State of California Seismic Hazard Zone for liquefaction with groundwater depth of 30 to 40 feet below ground surface (bgs). However, the CDMG Seismic Hazard Zone Report 058 (2002) indicates that the susceptibility of on site soils to liquefaction or lateral spreading is low to moderate. Further, the potential for liquefaction or lateral spreading at the site is low because of the very low topographic relief. Thus, the project's potential to result in unsuitable soil conditions would be less than significant.

Implementation of the All Single-Family Development Alternative would result in the disturbance of greater than 1 acre of soil; the project applicant would be required to obtain an NPDES permit from the SWRCB. The NPDES permit would require the project applicant to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that would prevent erosion impacts to the project site. BMPs for the project would include the use of silt fences and straw bales to prevent runoff from the active grading areas, use of proper grading techniques, shoring and bracing of the construction project site, and covering or stabilizing stockpiles of topsoil and other earth materials. Implementation of BMPs would reduce soil erosion impacts to a less-than-significant level.

Overall, this alternative would result in comparable earth resources impacts to the project because structures constructed at the site would be designed in accordance with the UBC and the same BMPs would be implemented to prevent erosion impacts. The project's and this alternative's earth resources impacts would be less than significant.

HYDROLOGY AND WATER QUALITY

The All Single-Family Development Alternative would result in surface disturbance through ground scraping, grading, and compaction associated with conventional development activities. Existing vegetation would be removed increasing the potential for erosion. Although the site is relatively flat and the potential for soil erosion is considered low, peak stormwater runoff could result in short-term sheet erosion in areas of exposed or stockpiled soils. Further, the compaction of soils by heavy equipment may reduce the infiltration capacity of soils and increase the potential for runoff and erosion. If uncontrolled, these soil materials could result in engineering problems, including the blockage of storm drainage channels and downstream sedimentation. The City of Santa Clara is a co-permittee of the Santa Clara Valley Urban Runoff Program (SCVURPPP) NPDES permit. The NPDES permit requires all projects that would disturb more than 1 acre to prepare and implement a SWPPP specifying BMPs to minimize discharge of sediment and pollutants to surface waters. BMPs for this alternative

could include, but are not limited to: protection of cut slopes and drainage ways from direct exposure to water runoff with native plantings immediately following grading activities; placement of erosion control matting on exposed slopes; and lining of drainage facilities to prevent erosion of site soils immediately following grading activities. Because this alternative would implement measures to prevent on- and offsite erosion, the would be a less-than-significant impact.

A Phase 1 Environmental Site Assessment (Phase 1) and a Phase 2 Site Characterization Report (Phase 2) were prepared for the project by Environ in November 2002 and May 2003. These reports were peer reviewed by Hallenbeck/Allwest in July 2003. The reports indicated that soil contamination resulting from past agricultural operations is present in isolated areas on the project site. DGS has entered into a VCA with the DTSC and has prepared a draft RAW to remove contaminated soils at the site. Based on the results of the Phase 1 and Phase 2, there is no evidence that contamination has reached groundwater beneath the site. Further, because contaminated soils would be removed from the site before construction, it is unlikely that past site operations could contribute to water quality impacts at the site. Therefore this would be a less-than-significant impact. Under this alternative, the project's and this alternative's earth resources impacts would be less than significant.

Residential land uses typically result in generation of atmospheric pollution, tire-wear residues, petroleum products, and oil and grease, which would be transferred to roadways in the community. Further, it is likely that fertilizers and pesticides would be used by residents to maintain landscaped areas. These constituents could enter the City's storm drainage system and could adversely affect the water quality of south San Francisco Bay (discharge point). This alternative would be subject to the SCVURPPP's existing NPDES General Permit, which requires that discharges of pollutants from areas of new development be reduced to the maximum extent practicable. Compliance with these standards requires that control measures be incorporated into the design of new development to reduce pollution discharges in site runoff over the life of the project. Because this alternative would be required to implement measures to reduce pollution discharges in site runoff, this would be a less-than-significant water quality impact.

The project site is primarily developed with abandoned hay fields, orchards, and associated agricultural buildings (i.e., greenhouses and storage buildings). A small portion (approximately 0.5-acre) of the site near the northwest corner is paved, while the remainder (16.5 acres) of the site is unpaved. Development of the alternative would pave and cover a majority of the site with roadways, sidewalks, building footprints, and landscaping. This alternative would increase the volume of stormwater that is generated onsite compared to existing conditions. Stormwater runoff rates from proposed land would be similar to the project, but could be slightly greater if the acreage of open space areas on the site is reduced compared to the project. A storm drainage system would be constructed on the site that would convey stormwater to the City's existing storm drainage system. Portions of the City's system (Forest Avenue) may have capacity to accommodate increased flows; however, some areas of the City's system (i.e., Winchester Boulevard) do not have capacity to accommodate increased flows. Because this alternative could adversely affect the City's storm drainage system resulting in on-

or offsite flooding, this would be a potentially significant impact. Mitigation recommended for the project (Impact 4.8-2), which includes the preparation of a Comprehensive Stormwater Drainage Plan, would reduce this impact to a less-than-significant level.

This alternative would result in comparable stormwater quality to the project. However, this alternative could increase stormwater volumes discharged to the City's stormwater drainage system above those estimated for the project. With implementation of mitigation recommended for the project, it is anticipated that this impact would be reduced to a less-than-significant level. Overall, this alternative's hydrology and water quality impacts would be less than significant, but could result in slightly greater stormwater volumes compared to the project.

PUBLIC SERVICES AND UTILITIES

The site is served by the City of Santa Clara Fire Department (SCFD), which provides general fire, hazardous material and emergency services in the City and the Santa Clara Police Department, which provide law enforcement services. Similar to the project, the SCFD and SCPD have indicated that emergency response times are not likely to increase as a result of the implementation of the All Single-Family Development Alternative, both short-term during construction operations, and long-term, because there would be a minimal increase in traffic volumes in the project area (refer to Section 4.10, Transportation). In addition, the SCFD and SCPD both indicated that implementation of this alternative would not substantially affect their ability to serve the project area, and no additional personnel or equipment would be needed (Scaletta, pers. comm., 2006; Sawyer, pers. comm., 2006). Therefore, under this alternative, this would be a less-than-significant impact.

The site is located in the Campbell Union School District (CUSD) for K–8 and the Campbell Union High School District (CUHSD) for grades 9 through 12. The CUSD operates three middle schools and nine elementary schools. Enrollment in the CUHSD has remained relatively constant at approximately 7,600 students (Selzer pers. comm., 2006). Implementation of the All Single-Family Development Alternative's 200 single-family units would generate approximately 28 elementary and middle school students and 34 high school students (based on 0.14 elementary students per dwelling unit and 0.17 high school students per dwelling unit). The proposed development would be assessed an impact fee, of $1.01 per square foot of dwelling unit to offset the cost of the additional student population (Selzer, pers. comm., 2006). Implementation of this alternative would have a less-than-significant impact on school facilities or student populations.

Water supply and service to the site would continue to be provided by the Santa Clara Valley Water District (SCVWD) and the City of Santa Clara Water and Sewer Utility (CSC). The Rinconada Water Treatment Plant has the capacity to treat up to 80 million gallons per day (mgd); however, it is currently only treating 24 mgd. CSC operates water storage facilities with 27.3 million gallons of water storage capacity (Water and Sewer Utilities Fact Sheet 2005). CSC operates and maintains two water mains in the vicinity of the project site: a 12-inch main in Winchester Boulevard and an 8-inch main in Henry Avenue. CSC requires water demand to be calculated and submitted by the developer's engineer.

CSC has indicated that they have available water supplies and delivery capacity to serve the proposed alternative and that no new major water main and water supply facilities would need to be constructed (Fitch, pers. comm., 2006). Because water supplies are available to serve this alternative, and no new major water facilities would be required, Under this alternative, this would be a less-than-significant impact.

The site is currently served by the CSC. Services provided by CSC include construction, operation, and maintenance of the sanitary sewer system. The CSC operates an 8-inch sanitary sewer line in Winchester Boulevard. Wastewater collected in the City is conveyed to the San Jose/Santa Clara Water Pollution Control Plant (WPCP). The WPCP, which is located in Alviso, is jointly owned by the cities of Santa Clara and San Jose and provides wastewater treatment service to 8 tributary agencies. The WPCP is an advanced, tertiary treatment facility with capacity to treat up to 167 mgd average dry weather flow. The average dry weather influent flow for WPCP during the 2005 calendar year was 118 mgd, after recycling some wastewater, the WPCP discharges approximately 100 mgd of average dry weather flow to San Francisco Bay. WPCP staff indicated that the WPCP has adequate discharge capacity to serve existing and proposed development in the City through at least 2010 (LeBaudour, pers. comm., 2006).

This alternative would generate wastewater that would be collected by the municipal sewer system and delivered to the WPCP for treatment and discharge to south San Francisco Bay. The project would be served by a 12-inch sewer main in Winchester Boulevard. Based on the results of sanitary sewer monitoring (Appendix I), CSC should be able to serve this development because there is adequate capacity in the existing sewer system and WPCP to convey and treat wastewater generated. This would be a less-than-significant impact.

This alternative would increase the volume of stormwater generated on the site as a majority of the site would be paved, covered with buildings, or landscaped. The City's storm drainage system is designed to accommodate stormwater flows from existing land uses for a 10-year storm event. Because this alternative would implement measures (described in Hydrology and Water Quality above and in Mitigation Measure 4.8-2) that would decrease the volume of stormwater generated at the site during a 10-year storm event at or below existing levels, or to levels that would not exceed available capacity in the system, this alternative would not adversely affect the City's storm drainage system.

Solid waste pick-up and disposal and recycling collection and processing in the project vicinity is provided by Mission Trail Waste Systems. Municipal waste is transported to the Newby Island Landfill in Milpitas, approximately 11 miles north of the site. According to the General Plan, the City has secured landfill disposal capacity for all of its solid waste disposal needs until the year 2019 through an agreement with owners of the landfill (City of Santa Clara 1992). The Newby Island Landfill has approximately 52 acres available for disposal of municipal waste. This acreage is sufficient to accommodate the City's municipal waste disposal needs until year 2019. This alternative would not result in an increase in waste beyond that projected in the City's calculations for future solid waste disposal needs. Therefore, under this alternative this would be a less-than-significant impact.

Overall, this alternative would result in comparable demands and effects on local public services and utilities. Because this alternative would reduce the number of units on the site it is likely that demands for some public services (i.e., water, wastewater, solid waste) would be reduced compared to the project. However, the project's and this alternative's public services and utility impacts would be less than significant.

TRANSPORTATION AND CIRCULATION

Construction associated with the All Single-Family Development Alternative would result in short-term increases in traffic on local roadways. Construction activities would require the hauling of equipment and materials to the project site and transportation of employees to and from offsite locations. Construction activities would require up to 150 construction workers that would commute to the site on a daily basis. These construction workers would generate 300 one-way daily trips to and from the project site. Construction vehicles and construction personnel would access the project site from Winchester Boulevard only and would park all vehicles in designated areas on the project site or in appropriate offsite areas designated for parking uses (e.g., parking garage). No construction-related vehicles (i.e., equipment, personal vehicles) would be allowed to park along streets in the surrounding neighborhood. Existing roadway volumes along Winchester Boulevard are approximately 19,400 vehicles per day.

This alternative would also include the excavation and removal of contaminated soils and the importation of clean fill material. Approximately 5,000 to 6,000 cubic yards of contaminated soil would be removed from the site and a similar volume of soil would be brought to the site as clean fill. It is estimated that removal and importation of the soils from the site would generate 600 to 720 one-way truck trips over the remediation period. It is likely that no more that 40 truck trips would occur per day. Further, these trips would not occur simultaneously with the construction worker trips because all remediation activities would be completed before construction of project.

The soil excavation, site preparation, and construction-related vehicle and truck trips would be temporary and would cease after the project is constructed. Further, these trips would be less than 4% of existing local roadway traffic volumes. Because these trips would be limited to daytime hours of construction and would not substantially increase traffic volumes, this alternative would result in less-than-significant construction traffic impacts.

The volume of traffic that would be generated by the All Single-Family Development Alternative was estimated based on rates in the Trip Generation published by the Institute of Transportation Engineers (ITE) (Sixth Edition, 1997). This document includes trip rates for various land uses and is a standard tool used for estimating traffic volumes. Observations of a representative City of Santa Clara park were conducted to provide supplemental PM peak-hour data for park uses.

This alternative includes a total of 200 single-family dwelling units and a 1-acre park on the project site. Similar to the project, the traffic analysis prepared for the alternative slightly overestimates the potential traffic impact by assuming that 210 single-family dwelling units

would be constructed on the site. The alternative is estimated to generate 2,169 daily trips, 165 AM peak hour trips (41 inbound/124 outbound), and 226 PM peak hour trips (145 inbound/81 outbound). Intersection LOS calculations were conducted to evaluate intersection operations under this alternative. The results of the LOS analysis are summarized in Table 7-4.

The intersection of Pruneridge Avenue and San Tomas Expressway is projected to continue to operate at an unacceptable LOS E during the PM peak hour; however, implementation of this alternative would only increase the volume-to-capacity ratio by 0.003, which is below applicable thresholds. The remaining City of Santa Clara and Santa Clara County (non-CMP) intersections evaluated are projected to operate at LOS B or C during both peak hours, which is acceptable based on City standards. Potential degradation of LOS at intersections from implementation of this alternative would be less-than significant.

The All Single-Family Development Alternative would not significantly affect traffic conditions at any of the non-CMP City of San Jose intersections. All City of San Jose intersections are projected to continue to operate at LOS D or better during both peak hours. Stevens Creek Boulevard and San Tomas Expressway intersection (a CMP intersection) in the City of San Jose is projected to continue to operate at LOS F during both peak hours with the addition of traffic associated with the single-family development option. Implementation of this alternative would result in an increase in the volume-to-capacity ratio of 0.003 and delay of 1.2 in the AM peak hour and a V/C ratio of 0.0 and delay of 0.2 in the PM peak hour, which is less than City of San Jose and CMP thresholds. The remaining key CMP intersections are projected to operate at LOS E or better and traffic conditions would not substantially worsen with implementation of this alternative. This would be a less-than-significant impact.

Access to the site under this alternative would be provided via a roadway and driveway on Winchester Boulevard. The roadway would provide full-access to the site with minor modifications to the signal and the intersection. This driveway would form the west leg of the southern portion of the offset intersection. The second driveway would allow right turn only in and out and would be located south of the full access roadway. These access points would provide adequate ingress and egress to the site and could adequately serve project-related traffic volumes under peak hour conditions (Fehr and Peers 2006). This alternative's site access impacts would be less than significant.

Winchester Boulevard has an offset intersection with Forest Avenue, with the west leg located approximately 80 feet north of the east leg. The main project site roadway would be located at the southern intersection across from Forest Avenue (east). There is a driveway cut that serves the project site, but is no longer being used because the site is abandoned. The main project site roadway would be incorporated into the Winchester Boulevard/Forest Avenue intersection to provide full access (i.e., allow both left and right turns) for vehicles entering and exiting the project site with minor modifications to the signal and the intersection. This intersection as it currently exists is projected to operate at an acceptable level of service using the adopted

Table 7-4
Background and All Single-Family Development Alternative Levels of Service

Intersection (Jurisdiction)	Peak Hour	Background		All Single-Family Development Alternative			
		Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. Delay	Δ in Crit. V/C
1. Newhall Street and Winchester Boulevard (CSC)	AM	19.3	B-	19.3	B-	0.0	+0.003
	PM	18.1	B-	18.3	B-	+0.3	+0.009
2. Pruneridge Avenue and San Tomas Expressway (County)	AM	52.6	D-	53.0	D-	+0.7	+0.003
	PM	60.7	E	61.2	E	+0.8	+0.003
3. Pruneridge Avenue and Saratoga Avenue (CSC)[3]	AM	23.6	C	23.6	C	0.0	+0.004
	PM	29.1	C	29.0	C	--0.1	+0.005
4. Pruneridge Avenue/Hedding Street and Winchester Boulevard (CSJ)	AM	35.4	D+	35.538.9	D+	+0.1	+0.007
	PM	38.2	D+		D	+1.1	+0.019
5. Hedding Street and Bascom Avenue (CSJ)	AM	53.2	D	53.844.7	D-	-0.2	+0.004
	PM	44.3	D		D	+0.5	+0.004
6. Forest Avenue and Winchester Boulevard (CSJ)[3]	AM	19.9	B-	24.828.6	C	7.5	+0.067
	PM	26.3	C		C	0.8	+0.115
7. Forest Avenue and Naglee Avenue (CSJ)	AM	36.339.4	D+	36.539.6	D+	0.1	+0.001
	PM		D		D	+0.4	+0.005
8. Dorcich Street and Winchester Boulevard (CSJ)	AM	8.9	A	9.2	A	+0.1	+0.008
	PM	13.8	B	13.5	B	-0.3	+0.009
9. Stevens Creek Boulevard and Saratoga Avenue (CMP)	AM	37.038.3	D+	37.038.3	D+	0.0	+0.002
	PM		D+		D+	0.0	+0.002
10. Stevens Creek Boulevard and San Tomas Expressway (County/CMP)	**AM**	**89.293.2**	**F**	90.194.0	**F**	+1.2	+0.003
	PM		**F**		**F**	0.2	+0.000
11. Stevens Creek Boulevard and Winchester Boulevard (CMP)	AM	42.2	D	44.850.3	D	2.0	+0.020
	PM	49.6	D		D	+2.2	+0.019
12. Stevens Creek Boulevard and Monroe Street (CSJ)	AM	36.3	D+	36.3	D+	0.0	+0.002
	PM	62.1	E	62.9	E	+0.5	+0.002
13. Stevens Creek Boulevard and Southbound I-880 Off-Ramp (CMP)	AM	21.325.4	C+	21.3	C+	0.0	+0.002
	PM		C	25.6	C	+0.2	+0.008
14. Tisch Way/Northbound I-280 On-ramp and Winchester Boulevard (CSJ)	AM	18.2	B-	18.3	B-	+0.6	+0.010
	PM	34.9	C-	37.9	C-	+0.1	+0.003
15. Moorpark Avenue and Southbound I-280 Off-Ramp (CMP)	AM	19.6	B-	19.6	B-	+0.1	+0.001
	PM	24.5	C	24.6	C	+0.3	+0.005
16. Moorpark Avenue and Winchester Boulevard (CSJ)	AM	38.641.8	D+	38.6	D+	0.0	+0.002
	PM		D	41.9	D	+0.2	+0.008

[1] Average stopped delay per vehicle for signalized intersections.
[2] LOS = Level of service.
[3] LOS calculations are based on current roadway configuration.
CSC = City of Santa Clara intersection
CSJ = City of San Jose intersection
CMP = Designated CMP intersection
County = Santa Clara County intersection
Source: Fehr & Peers 2006

method for analyzing offset intersections (obtained from the City of Santa Clara and the City of San Jose TRAFFIX databases). However, the addition of a new roadway leg to this intersection would result in operational and safety problems, including driver confusion at the shared left-turn/through lanes on Winchester Boulevard. This would be a potentially significant impact. However, mitigation (mitigation measure 4.10-3) recommended for the project, which includes improvements to this intersection would reduce this impact to a less-than-significant level under this alternative.

The onsite vehicular circulation includes access from Winchester Boulevard along the northern boundary of the project site and a main circular roadway that provides access to the perimeter houses on the property (Exhibit 3-3). North-south alley ways provide access to the cluster of homes in the central portion of the site and to the perimeter circular roadway. Based on evaluation of the proposed internal circulation plan, it appears that onsite circulation plans would be adequate to accommodate traffic under this alternative.

A perimeter roadway would provide access from Winchester Boulevard to perimeter homes with north/south alley ways providing access to homes located in the center of the property. It is anticipated that this circulation pattern would be sufficient to accommodate traffic associated with this alternative.

The study freeway segments were evaluated to determine if implementation of this alternative would contribute a substantial volume of project-related traffic during the AM and PM peak hours. Table 7-5 contains a summary of the analysis. The results of the analysis indicate that this alternative would generate vehicle trips that are less than 1% of the capacity of each freeway segment, which is below VTA thresholds. Further, none of these freeway segments would require additional analysis. Therefore, the alternative's freeway segment impacts would be less than significant.

Emergency access would be provided by the roadway and driveway on Winchester Boulevard and via an emergency vehicle-only access gate at Forest Avenue. Design and siting of all driveways would be done in consultation with the City of Santa Clara Public Works Department, City Fire Department, and City Police Department staff to ensure that the driveways provide adequate access for emergency vehicles (i.e., turning radii, lane width). Because the developers would be required to coordinate with the City Public Works Department, Fire Department, and Police Department to ensure adequate emergency access is provided, this alternative would result in a less-than-significant impact to emergency vehicle access.

The majority of construction for this alternative would occur in the footprint of the project site; however, construction of proposed intersection improvements and proposed driveways could partially obstruct roadways in the project vicinity. Obstruction of these roadways could adversely affect the ability of emergency response agencies to respond to an emergency in the project area. This would be a potentially significant impact. However, mitigation (mitigation measure 4.10-5) recommended for the project would reduce this impact to a less-than-significant level.

Table 7-5
Freeway Segment Analysis for All Single-Family Development Alternative

Freeway Segment	Direction & Lane Type	Peak Hour	No. of Lanes [1]	Capacity [2]	1% of Capacity	Project Trips	Requires Analysis?
I-280 Winchester to Saratoga	NB MF	AM	3	6,900	69	15	No
	NB HOV	AM	1	1,800	18	0	No
	NB MF	PM	3	6,900	69	11	No
	NB HOV	PM	1	1,800	18	0	No
	SB MF	AM	3	6,900	69	7	No
	SB HOV	AM	1	1,800	18	0	No
	SB MF	PM	3	6,900	69	19	No
	SB HOV	PM	1	1,800	18	0	No
I-280 Meridian to I-880	NB MF	AM	3.7	8,510	92	4	No
	NB HOV	AM	1	1,800	18	0	No
	NB MF	PM	3.7	8,510	92	13	No
	NB HOV	PM	1	1,800	18	0	No
	SB MF	AM	3.7	8,510	92	11	No
	SB HOV	AM	1	1,800	18	0	No
	SB MF	PM	3.7	8,510	92	8	No
	SB HOV	PM	1	1,800	18	0	No
I-880 Bascom to The Alameda	NB	AM	3	6,900	69	11	No
	NB	PM	3	6,900	69	9	No
	SB	AM	3	6,900	69	5	No
	SB	PM	3	6,900	69	15	No
I-880 Stevens Creek to Bascom	NB	AM	3	6,900	69	3	No
	NB	PM	3	6,900	69	3	No
	SB	AM	3	6,900	69	4	No
	SB	PM	3	6,900	69	11	No
I-880 Stevens Creek to I-280	NB	AM	3	6,900	69	7	No
	NB	PM	3	6,900	69	20	No
	SB	AM	3	6,900	69	16	No
	SB	PM	3	6,900	69	12	No
SR-17/I-280 to Hamilton	NB	AM	3.4	7,820	78	3	No
	NB	PM	3.4	7,820	78	7	No
	SB	AM	3	6,900	69	5	No
	SB	PM	3	6,900	69	4	No

[1] Source of lanes, volumes, and density: VTA's 2002 VTA CMP Database (April 2003).
[2] Capacity is based on 2,300 vehicles per hour per lane.

MF = Mixed-Flow Lanes
HOV = HOV Lane

Source: Fehr & Peers 2006

The City of Santa Clara's Zoning Ordinance requires a parking supply of two garage spaces for every single-family dwelling. This alternative would provide two-car garages for each single-family housing unit; consistent with the City's parking requirements. Therefore, this alternative would be in conformity with City parking requirements.

The Santa Clara VTA operates fixed route, commuter, and paratransit bus service and light rail transit service (LRT) in Santa Clara County and was contacted to obtain load factors for the bus routes that serve the site (Routes 23, 36, and 60). The Santa Clara VTA indicated that all bus routes are operating at load factors of 0.68 (i.e., 68%) or less, as presented in Table 7-6. As a result, all bus routes serving the project site would have adequate capacity to serve residents of the proposed development. Under this alternative, this would be a less-than-significant impact.

Table 7-6
Existing Load Factors

Bus Route	Direction	Peak Load	Capacity	Load Factor
23	Eastbound	24	38	0.63
23	Westbound	26	38	0.68
36	Eastbound	7	38	0.18
36	Westbound	9	38	0.24
60	Eastbound	16	38	0.42
60	Westbound	15	38	0.39

Source: Fehr & Peers 2006

According to VTA criteria, this alternative would result in a significant impact to bicycles and pedestrians if the project conflicts with an existing or planned facility/service or adds demand to one of these modes that is not adequately accommodated by appropriate facilities or services. This alternative includes the construction of sidewalks and pedestrian paths throughout the development. These sidewalks would provide pedestrian connections in the site, to Winchester Boulevard, and to the park.

The project site is located across Winchester Boulevard from the Valley Fair Transit Center and a shopping center that includes the Valley Fair Mall and a Safeway. This alternative would increase the number of pedestrians crossing Winchester Boulevard to access local commercial development. Pedestrian improvements would be included with intersection improvements at Winchester Boulevard and Forest Avenue and could accommodate increased pedestrian demand. However, similar to the project specific information on the design of the facilities is unknown at this time; therefore, this alternative could result in inadequate provision of pedestrian facilities. This would be a potentially significant impact. However, mitigation (mitigation measure 4.10-8) recommended for the project would reduce this impact to a less-than-significant level.

The VTA's Bicycle Technical Guidelines recommend providing one Class I bicycle parking space per every 30 park employees and one Class II parking space per 9 park users during peak daylight times of the peak season; however, the City of Santa Clara Parks and Recreation Department would determine the type and number of bicycle facilities required at the project site. Class I bicycle parking includes bike racks or a secure room with key access for regular bicycle commuters. Class II bicycle parking is a bike rack to which the frame and at least one wheel can be secured with a user-provided U-lock or padlock and cable. Similar to the project, this alternative could result in the inadequate provision of bicycle facilities; this would be a potentially significant impact. However, mitigation (mitigation measure 4.10-8) recommended for the project would reduce this impact to a less-than-significant level.

Neighborhood Impacts

Similar to the project, a neighborhood analysis was also conducted, the purpose of which was to determine whether traffic associated with this alternative would result in a "livability" impact on surrounding neighborhood streets.

The study area for the neighborhood analysis is bounded by Pruneridge Avenue on the north, Stevens Creek Boulevard on the south, Cypress Avenue on the west, and Winchester Boulevard on the east. Existing 24-hour traffic volumes that represent the typical average weekday traffic conditions were gathered and are summarized in Table 7-7.

Table 7-7
Existing Daily Traffic Volumes

Street	Location	Traffic Volumes (vehicles per day)
Forest Avenue	Jill to Winchester	860
	Henry to Pineview	842
	Douglane to Westridge	995
Fernwood Avenue	Winchester to Jill	199
Jill Avenue	Pruneridge to Forest	217
Crestview Drive	Pruneridge to Forest	168
Pineview Drive	Pruneridge to Forest	214
Henry Avenue	Pruneridge to Forest	321
	Dorchich to Cecil	755
Dorcich Street	Henry to Cecil	560
Cecil Avenue	Henry to Dorcich	478
Cypress Avenue	Forest to Cecil	2,037

Source: City of Santa Clara and Fehr & Peers 2005

As previously described, implementation of this alternative is estimated to generate 2,169 daily trips and 226 PM peak-hour trips (145 inbound and 81 outbound). The trips approaching the site from the west on Stevens Creek Boulevard and on Pruneridge Avenue and departing from the site to westbound Stevens Creek Boulevard were assigned to the roadway network in the study area to reflect the potential use of neighborhood streets. The trip assignments were based on the peak period travel time surveys and field review (Fehr & Peers 2005). The results

of the travel time surveys indicated that there is no substantial time savings by using alternate travel routes through the neighborhood versus using the more direct arterial routes. Furthermore, during non-peak hours, congestion on the arterials is less than during the PM commute period. Travel times on the arterial routes are likely to be improved during other hours of the day because (1) these routes are more direct, (2) less vehicle queuing at signalized intersections creates more right-turn-on-red opportunities, and (3) actuated traffic signals at major intersections run on shorter cycle lengths when traffic demand is lower, resulting in shorter delays. Based on these results, the analysis assumes a conservatively high usage of neighborhood streets (40 to 50% during the PM peak hour and 10% during an entire day).

Estimated PM peak hour and daily traffic volumes added to neighborhood streets by the proposed alternative are summarized in Table 7-8.

Table 7-8
All Single-Family Development Alternative Potential Net-Added Traffic by Roadway Segment

Roadway Segment	With Single-Family Alternative and Current Winchester/Forest Intersection Design		With All Single-Family Development Alternative and Modified Winchester/Forest Intersection Design [1]	
	PM Peak Hour	Daily	PM Peak Hour	Daily
Cypress – Pruneridge to Forest	0	0	0	0
Cypress – Forest to Stevens Creek	+3	+6	+3	+6
Henry – Pruneridge to Forest	+0	+2	+0	+2
Henry – Forest to Dorcich	+5	+7	+11	+68
Henry – Dorcich to Cecil	+8	+14	+8	+14
Henry – Cecil to Stevens Creek	+10	+20	+10	+20
Pineview – Pruneridge to Forest	+1	+2	+1	+8
Crestview – Pruneridge to Forest	+2	+3	+3	+15
Jill – Pruneridge to Fernwood	+4	+6	+6	+24
Jill – Fernwood to Forest	+4	+6	+9	+51
Fernwood – Jill to Winchester	0	0	+5	+49
Forest – Cypress to Henry	+3	+6	+3	+6
Forest - Henry to Pineview	+8	+15	+2	-46
Forest – Pineview to Crestview	+9	+17	+1	-75
Forest – Crestview to Jill	+11	+20	0	-113
Forest – Jill to Winchester	+15	+26	0	-141
Dorcich – Henry to Cecil	+3	+7	+9	+63
Dorcich – Cecil to Winchester	+5	+13	+11	+74
Cecil – Henry to Dorcich	+2	+6	+2	+6

Notes: [1] Includes redirection of existing neighborhood traffic because of intersection modification.
Source: Fehr & Peers 2005

The projected changes in daily traffic volumes on neighborhood streets with and without the Winchester Boulevard/Forest Avenue intersection modification were added to existing daily traffic volumes for the study street segments to determine the percent increase in traffic as a result of implementation of this alternative. The change in total daily traffic volumes is presented in Table 7-9. The daily traffic volumes on all local street segments, with the

Table 7-9
Change in Total Daily Traffic Volumes with All Single-Family Development Alternative

Street	Location	Existing Volume (vpd)[1]	With Optional Development and Existing Forest Access			With Optional Development and Modified Forest Access		
			Added (vpd)	Total (vpd)	% Change	Added (vpd)	Total (vpd)	% Change
Forest Ave.	Jill to Winchester	860	26	886	3.0%	-141	719	-16.4%
	Henry to Pineview	842	15	857	1.8%	-46	796	-5.5%
	Henry to Cypress	995	6	1,001	0.6%	6	1,001	0.6%
Fernwood Ave.	Winchester to Jill	199	0	199	0.0%	49	248	24.6%
Jill Ave.	Pruneridge to Forest	217	6	223	2.8%	51	268	23.5%
Crestview Dr.	Pruneridge to Forest	168	3	171	1.8%	15	183	8.9%
Pineview Dr.	Pruneridge to Forest	214	2	216	0.9%	8	222	3.7%
Henry Ave.	Pruneridge to Forest	321	2	323	0.6%	2	321	0.6%
	Forest to Cecil	755	14	769	1.9%	68	823	9.0%
Dorcich St.	Henry to Winchester	560	13	573	2.3%	74	634	13.2%
Cecil Ave.	Henry to Dorcich	478	6	484	1.3%	6	484	1.3%
Cypress Ave.	Forest to Cecil	2,037	6	2,043	0.3%	6	2,043	0.3%

[1] vpd= vehicles per day
Source: Fehr & Peers 2005

exception of Cypress Avenue, which acts as a connector street, would be less than 1,000 vehicles per day (vpd), with or without the Winchester Boulevard/Forest Avenue intersection modification. Further, the greatest absolute increase in vehicle trips would be 74 trips on Dorcich Street between Henry and Cecil with the Winchester Boulevard/Forest Avenue intersection modification. Implementation of this alternative would not cause any of the study street segments to exceed their total volume threshold (i.e., 1,500 for local streets and 3,000 for connector streets), and would not cause the exceedance on any street of the weekday daily traffic volume increase threshold of 150 vpd with or without the recommended Winchester Boulevard/Forest Avenue intersection modification. Under this alternative, this would be a less-than-significant impact.

Overall, this alternative would result in comparable impacts to the project. Because this alternative includes land use that would have a higher vehicle trip generation rate, this alternative would slightly increase the number of vehicle trips on local roadways. However, this alternative's and the project's transportation impacts would be less than significant with mitigation.

CULTURAL RESOURCES

A detailed description of the cultural resources on the site and in the surrounding vicinity is included in Section 4.11, Cultural Resources, of the DEIR and in the technical reports developed as part of the evaluation. No prehistoric cultural sites have been identified in the project area (Holman 2002). A number of past uses related to historic-era uses of the site have been noted in the project area. The collective uses (i.e., research activities, care facilities, women's relief corps) and history of the property, while interesting, do not have any potential historical significance as a cultural landscape or geographic area based on the importance of past uses. None of these uses meet the criteria for significance that would render the property eligible for listing to the California Register of Historic Resources (CRHR) or identification as a California Historical Landmark or a California Point of Historical Interest. As a result, development of the site under this alternative would not disturb or destroy any known significant cultural resources. This would be a less-than-significant impact.

Based on the records search and project site survey, there are no known prehistoric cultural resources on the project site or in the nearby project vicinity. As a result, this alternative would not disturb or destroy any known prehistoric cultural resources. This would be a less-than-significant impact.

No archaeological sites are known to occur on the project site or in the nearby project area. However, given the developmental history of the property, it is possible that unidentified archaeological resources would be uncovered during grading and construction operations. Disturbance of these resources would be a potentially significant impact. However, implementation of mitigation (mitigation measure 4.11-3) recommended for the project would reduce this impact to a less-than-significant level.

No human remains are known to occur on the project site. However, it is possible that unidentified archaeological resources, including human remains, may be uncovered during grading and construction operations. Disturbance of these resources would be a potentially significant impact. However, implementation of mitigation (mitigation measure 4.11-4) recommended for the project would reduce this impact to a less-than-significant level.

Overall, this alternative would result in comparable impacts to the project. Both the project and this alternative would result in less-than-significant impacts with mitigation.

POPULATION/HOUSING

The All Single-Family Development Alternative includes the development of approximately 200 single-family residences and no multi-family or senior citizen housing. Based on the proposed densities and using the City's population generation rate of 2.58 persons per household (pph), this alternative could generate a maximum of 516 persons (Chen, pers. comm., 2003). Although the project would provide new housing in the City, the City is currently operating under a housing shortfall and it is likely that many of the new homes would be occupied by current City residents. Further, the total occupancy of this alternative,

which is less than 1% of the City's current population, would not substantially increase population in the City above what was contemplated in the City's General Plan. The proposed alternative would not result in substantial induced growth and would result in a less-than-significant impact.

This alternative would require the removal of all existing structures on the project site. None of these structures serve as housing, as all structures are associated with former agricultural operations (i.e., greenhouses, storage sheds). This alternative would not result in the displacement of existing housing. Instead, the project would provide new housing in the City. No impact would occur. Overall, this alterative would result in comparable population and housing impacts to the project, and the project's and this alternative's impacts would be less than significant.

7.4.2 ABILITY TO MEET PROJECT OBJECTIVES

The All Single-Family Development Alternative would meet some of the project objectives outlined by the City, including, providing additional housing units to assist in meeting the City's housing objectives, providing residential development compatible with the surrounding area, providing vehicular access from Winchester Boulevard and providing onsite drainage consistent with City standards. However, this alternative would not meet one of the City's or State's primary objectives of providing affordable senior housing at the site.

This alternative would meet the State's objectives of maximizing the financial benefits to the State, remediation of soil contamination on the 90 North Winchester Boulevard site and the use of state surplus land for private uses.

7.5 REDUCED DEVELOPMENT ALTERNATIVE

The Reduced Development Alternative assumes that development of the project would minimize conversion of state-designated important farmlands (a significant and unavoidable impact of the project) on the project site. The entire project site is designated as prime farmland or farmland of statewide importance under the FMMP. This alternative assumes that development of reduced density would occur on a smaller portion of the site.

The areas of the site not developed with single-family uses would remain undeveloped under this alternative and would continue to be owned by DGS. Although a portion of the site would remain undeveloped, fenced, and securely locked, this alternative does not preclude the development of the remainder of the site at some future date for state uses, including educational, office, research, and institutional. However, it is speculative at this time to determine and evaluate the types of facilities and operations that could occur. Therefore, in the interim, the site would remain undeveloped. Single-family residential and park uses similar to the project (e.g., lot sizes and housing design) would be developed in the eastern portion of the site (on approximately 8.5 acres), but at reduced densities. This development would be sited to connect with existing adjacent residential areas. Single-family development on this acreage would result in approximately 80–90 housing units with 10% of these housing

units (i.e., 8–9 units) designated for affordable housing. This affordable housing component is similar to other developments in the city. Development of the eastern half of the site is a reasonable expectation for this alternative, because this portion of the site is closest to existing residential development and would provide multiple access points to the site (e.g., Winchester Boulevard) (Exhibit 7-1). All project site structures would be demolished and removed from the site. Access to undeveloped portions of the site would be provided off Forest Avenue, while access to the proposed development would be provided by one to two driveways along Winchester Boulevard. If soil contamination is present in areas where development would occur, it would be remediated to levels appropriate for proposed uses. The remainder of the site would be undeveloped and soil contamination would remain in place. Eventually, these undeveloped areas could be developed with other state uses after appropriate remediation. Public access to unremediated parts of the site would be prohibited by fences and locked gates; however, it is too speculative at this time to determine and evaluate the types of facilities and operations that could be located in this area. After developed, onsite soils would be remediated to levels appropriate for proposed uses.

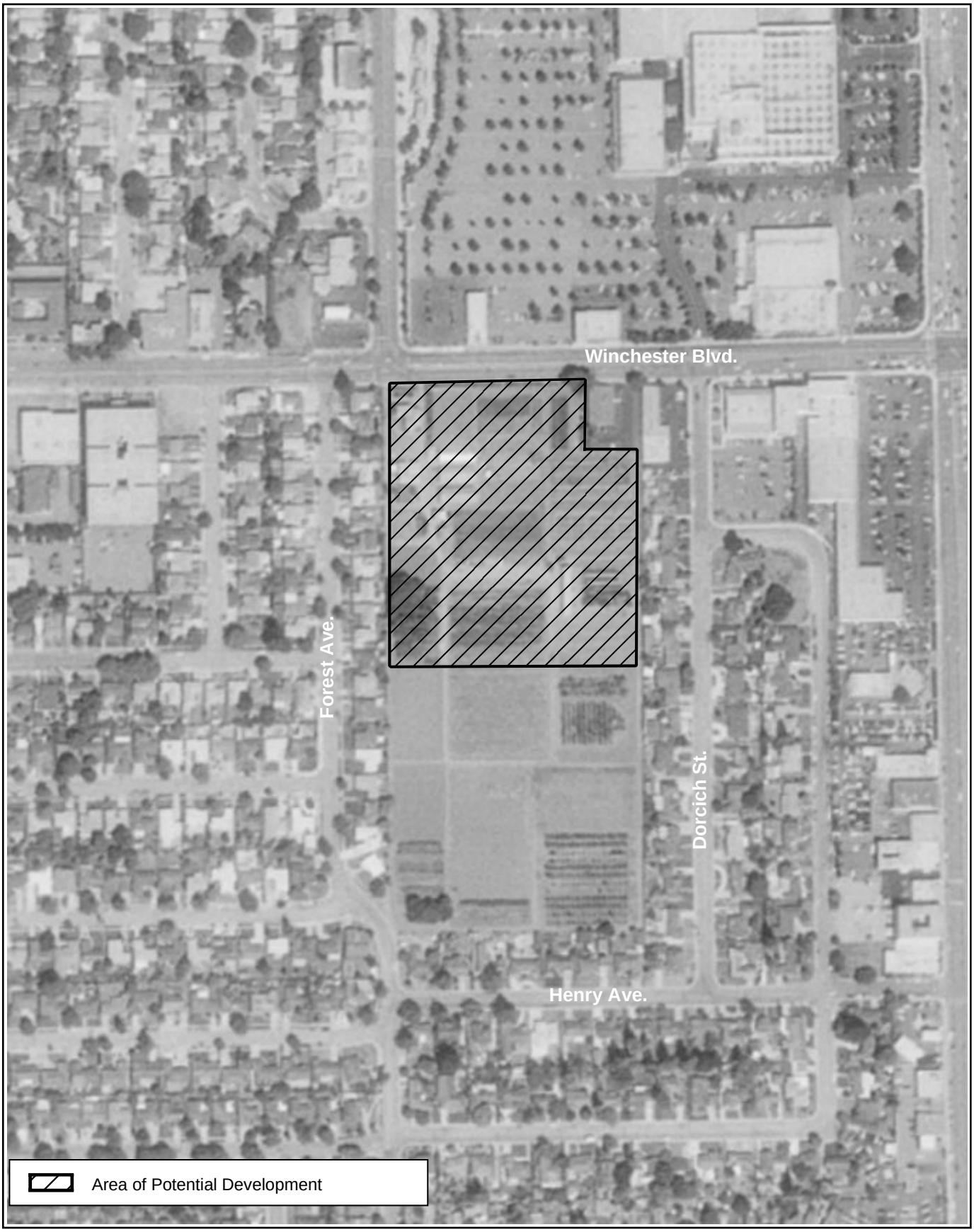
7.5.1 ENVIRONMENTAL ANALYSIS

LAND USE

This alternative would result in reduced land use impacts compared to the project, because half the site would remain unchanged from its current use condition. This alternative would result in less-than-significant impacts related to alteration of land use and land use compatibility, because comparable land uses to the project and surrounding development would occur under this alternative. This alternative would reduce the amount of important farmlands developed onsite. Because some important farmlands would be developed, this alternative would result in a significant effect related to conversion of farmland; no feasible mitigation is available to reduce this impact to a less-than-significant level. Although this alternative would result in a significant and unavoidable farmland impact, it would result in the development of less acreage compared to the proposed project, and therefore, this project would result in reduced farmland impacts compared to the project.

VISUAL RESOURCES

This alternative would result in reduced visual impacts compared to the proposed project because development of the entire site would not occur. The views of the western half of the project site would not change substantially, because it would remain in its current, undeveloped condition with existing fencing and vegetation. The effect on views of the eastern half of the project site would be comparable to the project's visual impacts. Existing farmland would be replaced with a residential land uses similar in character to the existing neighborhoods surrounding the site. These alterations would not substantially degrade views of the site. No significant visual impacts would occur under this alternative.



Source: USGS 1993 at terraserver.microsoft.com

Reduced Development Alternative

EXHIBIT 7-1

Santa Clara Gardens Development Project Recirculated Draft EIR

P 3T008.01 07/04

NORTH

EDAW

AIR QUALITY

This alternative would result in reduced construction-related air quality impacts compared to the proposed project because a reduced number of buildings would be constructed. Further, long-term local and regional air quality impacts would be less than those associated with the proposed project, because this alternative would generate fewer vehicle trips associated with the reduced number of residential units; therefore, this alternative would result in less-than-significant air quality impacts.

NOISE

This alternative would result in comparable construction-related noise impacts to the project because new housing would be constructed on the site. Noise associated with construction equipment could reach high levels for brief periods of time. These noise levels could potentially exceed the City's maximum acceptable exterior noise standard of 75 dBA at nearby adjacent residences. This would be a potentially significant impact; however, implementation of mitigation recommended for the project would reduce this impact to a less-than-significant level.

Operational traffic noise levels would be comparable to the project, resulting in a less than 3.0 dBA. This change would not represent a substantial change in the ambient noise environment. Therefore this would be a less-than-significant impact.

BIOLOGICAL RESOURCES

This alternative would result in reduced biological resource impacts compared to the project because only approximately half of the project site would be developed with urban uses. Because the existing condition of the project site does not provide valuable natural habitat, the biological effects of the development resulting from this alternative would be less than significant.

HAZARDS AND HAZARDOUS MATERIALS

This alternative would result in comparable types of construction-related, hazards and hazardous material impacts to the project because it would demolish existing structures (which contain asbestos and lead-based paint) and would require handling, transporting, storage, and use of hazardous materials (e.g., fuels, asphalt, etc.) during construction activities. These activities would be done in accordance with applicable local, state, and federal regulations. Because this alternative would not maximize the financial benefits to the state, it would not be feasible to remediate the contaminated soils in those areas left undeveloped. As a result, contaminated soils would remain in the undeveloped portion of the site behind a fence and locked gate, similar to existing conditions. Access to the site would be prohibited. Because the project would handle hazardous materials in accordance with applicable regulations and public access to unremediated areas would be prohibited, this alternative would result in less-than-significant impacts.

EARTH RESOURCES

This alternative would result in similar types of earth resource impacts, although reduced in magnitude, compared to the proposed project, because it would involve construction of residential units on approximately half of the project site. Because all of the proposed project's earth resource impacts would be less than significant, the effects of this alternative would also be less than significant.

HYDROLOGY AND WATER QUALITY

This alternative would result in comparable types of hydrology and water quality impacts to the project, although reduced in magnitude. Development of the eastern half of the project site would increase the amount of onsite impervious surfaces compared to existing conditions, which could increase stormwater volumes that could exceed the existing design capacity of the City's storm drainage system. Although the increase in stormwater would be less than the project, the effect could still be significant recognizing potential capacity constraints in the City's storm drainage system serving the site. Mitigation recommended for the project would reduce this alternative's impact to a less-than-significant level. Construction and operations at the site would result in ground disturbance similar in nature to the project, but reduced in magnitude. This ground disturbance could lead to onsite or offsite erosion; however, mitigation recommended for the project would reduce this impact to a less-than-significant level.

PUBLIC SERVICES AND UTILITIES

This alternative would result in similar types of public service and utilities impacts as the project, because residential development would occur. While the reduced number of units would be expected to decrease service and utility demand compared to the project, the difference is not substantial, recognizing that neither the proposed project nor this alternative would cause significant public service and utility effects.

TRANSPORTATION AND CIRCULATION

This alternative would result in reduced traffic generation impacts compared to the project, because a reduced number of residential units and associated vehicle trips would be generated from the proposed onsite land uses. Because this alternative would be designed similar to the project and would result in fewer trips compared to the project, it is anticipated that this alternative would not result in significant impacts to the operation of nearby roadway intersections or freeway segments, would provide adequate onsite circulation and access, would provide adequate onsite parking, and would not substantially increase demand for public transportation. Because this alternative would site development in the eastern portion of the project site, access to the site would be provided by Winchester Boulevard. Therefore, this alternative would also require the need to add a new roadway leg to the intersection of Winchester Boulevard/Forest Avenue. Similar, vehicle access safety impacts would occur under this alternative and these impacts would be reduced to a less-than-significant level with

implementation of mitigation recommended for the project. This alternative would also substantially reduce and could avoid the project's cumulative intersection impacts to the Stevens Creek Boulevard/San Tomas Expressway, Stevens Creek Boulevard/Monroe Street, Pruneridge Avenue/San Tomas Expressway, Hedding Street/Bascom Avenue, and Stevens Creek Boulevard/Winchester Boulevard intersection.

CULTURAL RESOURCES

This alternative would only develop a portion of the site, leaving the remainder of the site undeveloped. No significant archaeological or historic resources are located on the site. This alternative could result in potentially significant impacts related to previously undiscovered cultural resources. However, implementation of mitigation recommended for the project (mitigation measures 4.11-3, and 4.11-4) would reduce these impacts to a less-than-significant level. Therefore, this alternative would result in a less-than-significant cultural resource impact.

POPULATION AND HOUSING

This alternative would result in similar types of population and housing impacts compared to the proposed project, because new housing would be constructed. Fewer single-family housing units and no affordable housing would be included in this alternative. Therefore, this alternative would not respond to the City's housing objectives as successfully as the project.

7.5.2 ABILITY TO MEET PROJECT OBJECTIVES

This alternative would partially meet the City's and state's project objectives, related to provision of single-family residential housing to meet the City's housing shortfall. It would not meet the objective to maximize the financial benefits to the state, because the value of about half of the site would not be established based on future development.

7.6 OFFSITE ALTERNATIVE

An offsite alternative would require the location of another potentially feasible site for development of uses consistent with those of the proposed project. As directed in the State CEQA Guidelines Section 15126.6(f)(2)(A), "the key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." Because certain significant effects of the proposed project are site-specific (such as the conversion of prime and important farmland), it would be conceivable that an alternative location could avoid the significant effect. Therefore, it is valid to determine if feasible alternative locations may exist in the area.

The State CEQA Guidelines Section 15126.6(f)(2)(B) indicate that "if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion." If feasible alternative locations do not exist, the EIR analysis need not continue to consider the issue of an offsite alternative.

The area in which it is reasonable to search for alternative sites would be the jurisdiction of the lead agency, the City of Santa Clara. A site that could feasibly attain the basic objectives of the project would need to be of comparable size, with adequate access to roadways and utilities to support residential development, in a location where residential uses would be consistent with the General Plan designation and compatible with adjacent uses. Also, to achieve the primary objective of the State to maximize and capture the value of surplused State property, an alternative location would also need to contain state-owned land that could be declared surplus and made available for sale.

An examination of developable parcels in the City and a review of the City of Santa Clara General Plan Land Use Element lead to the conclusion that feasible alternative locations for the project do not exist. Currently, there are approximately 156 acres of undeveloped land in the City. Of that total, 116 acres support approved office and commercial projects and would therefore be unavailable for other developments. Of the remaining 40 acres of undeveloped land, 15 acres are designated for industrial or commercial development distributed among 4 parcels ranging in size from 3 to 8 acres. The General Plan land use designations and small size of these parcels would make them infeasible for the project. The project site comprises 17 of the remaining 25 acres after deducting the land approved for other projects and the industrial and commercially designated land. The 8 acres not contained in the project site are scattered among small parcels that could not feasibly support the project. In addition, there are no other state lands available for surplus in the City of Santa Clara. Based on the lack of availability of undeveloped property with sufficient acreage and other conditions to support the project and achieve its basic objectives, feasible alternative locations for analysis in this DEIR do not exist. No further analysis of alternative locations is therefore needed.

7.7 ALTERNATIVES PREVIOUSLY CONSIDERED AND REJECTED

State CEQA Guidelines Section 15126.6(c) provides that an EIR "should also identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." This section provides a discussion of the existing General Plan Alternative, Open Space Alternative, and the State Office Development Alternative, and explains the reasons for rejecting these alternatives from further consideration.

7.7.1 EXISTING GENERAL PLAN ALTERNATIVE

The Existing General Plan Alternative is based on the assumption that the project site would be developed with residential and senior-housing development at maximum densities permitted under its current land use designation. The project site's moderate density residential designation would allow the development of up to 25 dwelling units per acre and 55 persons per acre. Based on these densities, the project site could be developed with a maximum of 425 dwelling units and could support 935 persons. This alternative was originally conceived as a means of providing as many residential units on the project site to reduce the City's housing shortfall and secure as great an economic value from the property as possible. Therefore, this alternative would provide more housing than the proposed project.

In general, this alternative would result in similar earth resources, biological, public services, population and housing, and hazards and hazardous materials impacts compared to the proposed project because the project site would be developed with similar land use types. The project's significant and unavoidable impacts to important farmland and vehicular site access (if mitigation can not be implemented) would not be avoided, because the site would be completely developed and traffic generated by this alternative would be greater than traffic generated under the proposed project. Further, this alternative would likely result in increased construction-related noise and air quality impacts compared to the proposed project as a greater amount of construction would occur over a longer time period. This alterative could result in greater land use compatibility and visual impacts because a more intense level of development that could include buildings of multiple stories (e.g., apartments) would be located onsite. The intensity of development would likely generate greater stormwater volumes that would need to be detained onsite before being discharged to the City's stormwater system. It is unknown whether it would be feasible to detain the increased stormwater volumes within the project site.

Because this alternative would not reduce or eliminate the project's significant and unavoidable impacts and it would likely result in greater environmental impacts, it was eliminated from further evaluation.

7.7.2 OPEN SPACE ALTERNATIVE

The Open Space Alternative would involve demolishing most of the structures on the project site and creating an open space resource area for public use. In general, this alternative would result in reduced hydrology and water quality, earth resources, biological, land use, air quality, and visual impacts because no development on the site would occur. However, these impacts with mitigation, would be less than significant under the proposed project. This alternative would avoid the project's significant and unavoidable site access impact because no development would occur.

This alternative would not meet any of the state's or City's project objectives, particularly those related to the provision of single-family residential and affordable senior housing to meet the City's housing shortfall, it would not maximize the financial benefits to the state, and it would not reuse the site for private uses. Because this alternative would not reduce or eliminate any of the project's significant and unavoidable impacts, it would result in a new significant hazard impact, and it would not meet project objectives, it was eliminated from further evaluation.

7.7.3 STATE OFFICE DEVELOPMENT ALTERNATIVE

The State Office Development Alternative would involve the development of the site with state uses. The state has preliminarily evaluated its office and institutional needs in the project area and has determined that the project site could support a general purpose state office building. Existing demand for state office building space totals approximately 119,000 square feet. This building would be two stories tall and would occupy approximately 1.5 acres. An office building of this size would generate a need for approximately 480 parking spaces. The

parking lot would occupy approximately 4 acres of the site. The remainder of the site would be used for other state facilities. Currently there is a demand for an armory site from the Military Department. The armory would store military vehicles and equipment and would occupy the remaining 11.5 acres of the site.

This alternative would not be consistent with the City's general plan, which designated moderate-density residential use for the project site. The alternative would not include a public park and likely would not meet the general plan requirement of 40% of the site to be landscaped. The eastern boundary of the site is adjacent to commercial development (shopping center and parking garage) across Winchester Boulevard), while the remaining three sides of the parcel are bounded by primarily residential land use. Depending on the height, size, and location of the office building(s), this use may not be compatible with surrounding neighborhood, recognizing differences in use intensity and potential land use-related environmental consequences, such as visual effects, onsite traffic, and noise.

In general, this alternative would result in similar biological, air quality, earth resources, hazards and hazardous material, population and housing, public services, and cultural resources impacts compared to the proposed project because the site would be developed with state uses. This alternative would not reduce or avoid any of the significant and unavoidable impacts of the project (i.e., important farmlands, vehicular site access, and cumulative traffic) because the site would be completely developed (no original buildings would remain) and traffic generated by this alternative would be greater than traffic generated under the proposed project. Further, this alternative would likely result in increased construction-related noise and air quality impacts compared to the proposed project because a greater amount (i.e., length of construction) of construction would occur. This alterative could result in greater land use compatibility and visual impacts because a more intense level of development would be located onsite. The intensity of development would likely generate greater stormwater volumes that would need to be detained onsite before being discharged to the City's stormwater system. It is unknown whether it would be feasible to detain the increased stormwater volumes within the project site.

Because this alternative would not reduce or eliminate the project's significant and unavoidable impacts and it would likely result in greater environmental impacts, it was eliminated from further evaluation.

7.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative – Continuation of Existing Land Uses would be environmentally superior to the project and all other alternatives, because it would eliminate the project's potentially significant and significant construction noise, traffic, and water quality impacts. It would eliminate the project's significant and unavoidable vehicular site access, important farmland, and cumulative air, farmland, and traffic impacts. State CEQA Guidelines Section 15126.6(e)(2) requires that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The Reduced Development Alternative would be environmentally superior to the proposed project because it would meet certain basic objectives of the project , and would reduce the project's significant and unavoidable farmland impact. This alternative would result in some similar types of effects related to visual, air quality, and noise impacts, but with less magnitude. It would reduce, but would not eliminate, the project's significant and unavoidable important farmland impact. Although this alternative would meet most project objectives, it would not meet the City's objective related to provision of affordable senior housing to meet the City's housing shortfall and the State's objective to maximize the financial benefits to the state.

The No Project Alternative–Current Zoning would not be environmentally superior to the proposed project, All Single-Family Development, and Reduced Development alternatives. Although this alternative would reduce or eliminate the project's significant and unavoidable important farmland impact, it would result in a new significant impacts related to the potential exposure of workers on the site to hazardous materials and contaminated onsite soils, the potential exposure of residents to new significant noise sources (e.g., farming activities) that could exceed the City's noise standards, potential seismic-related hazards because existing on-site buildings are not designed to meet current seismic safety standards, and the potential to result in hazardous material spills or contamination because of the use of pesticides and other hazardous materials onsite.. Importantly, this alternative would not meet any of the City's or state's project objectives, especially those related to provision of single-family residential and affordable senior housing to meet the City's housing shortfall, and it would not maximize the financial benefits to the state.

The environmental effects of the All Single-Family Development Alternative would be comparable to the proposed project, because it would result in a similar level of development on the site and similar levels of construction and operational impacts (i.e., air quality, noise, traffic). This alternative would not avoid the project significant and unavoidable prime farmland impact. However, it would result in the removal of onsite contamination similar to the project. Although this alternative would meet many of the project's objectives, it would not meet objectives related to the provision of affordable senior housing at the site.